







for Future Development of Big Pine Key and No Name Key





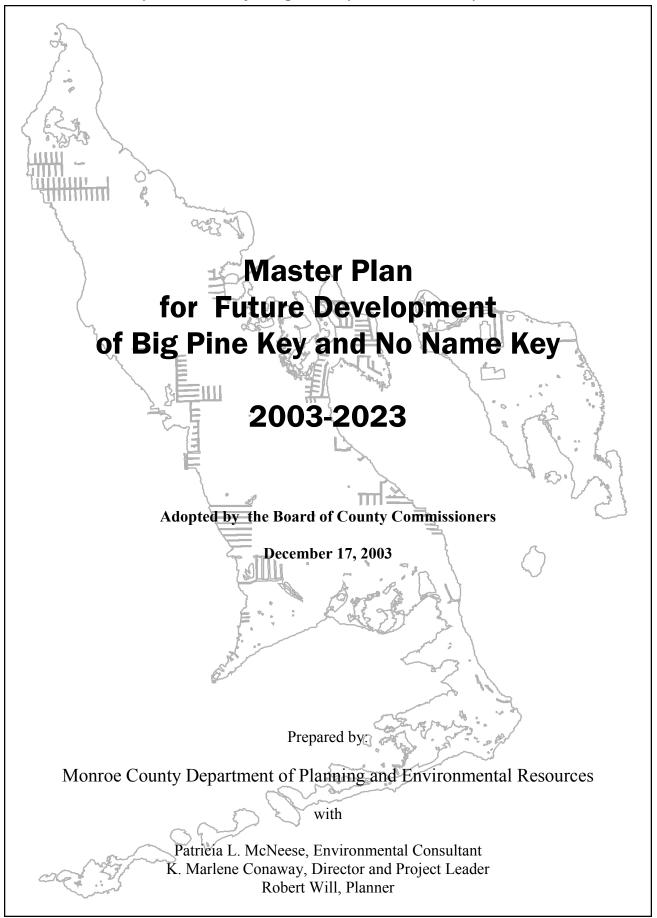


Monroe County Planning and Environmental Resources Department









Community Vision

"We envision Big Pine and No Name Key as:

- A rural community with a small town atmosphere and way-of-life where people feel a connection with their friends and neighbors.
- A community rich in natural and scenic resources including endangered habitat found nowhere else in the world.
- A unique community in the Florida Keys where people can live in harmony with the natural world.
- Where residents and visitors can take advantage of the local goods and services without fighting traffic.
- Where kids of all ages have plenty of recreational opportunities.
- Where the dreams of home ownership and planting roots in the community can be realized.
- Where government regulations make sense and work for the betterment of all.
- Above all, we envision a community that responds to the needs of all its inhabitants."

Executive Summary

During the spring and fall of 2000, the residents and property owners of Big Pine and No Name Keys worked with Monroe County planning staff on the Livable CommuniKeys Program (LCP) to identify the needs and desires of the community for future development on Big Pine Key and No Name Key .

Alternative potential development patterns and types were drafted during the process for evaluation to determine any possible impacts to the endangered species which make these islands their home. In order for any new development to occur, including road improvements, a permit from U. S. Fish and Wildlife Service (USFWS) was required. Therefore, the county and state have funded the preparation of a Habitat Conservation Plan (HCP) for the islands.

The HCP is a proposal to mitigate and compensate for the potential negative effects of development activities on the endangered species. The HCP is being reviewed by the USFWS to determine if it meets the species protection criteria.

The HCP is a permit application to allow a limited amount of development to occur as long as the impact on the endangered species is minimized and mitigated and the long term viability of the species is considered. The USFWS interest is in the protection of the endangered species, while the LCP plan provides the framework for development activities.

The LCP Master Plan minimizes impacts from development on the endangered species by directing development to areas of low habitat value and reducing trip length; limiting the amount of proposed development to maintain the rural character and to maximize the amount of habitat protected; and mitigating development by purchasing land for permanent protection.

The proposed LCP Master Plan will classify all land on Big Pine and No Name Keys into three 'tiers' based on conservation and infill priorities. Most of the islands are classified as Tier 1 because of their environmental sensitivity and importance for the continued viability of the endangered species. Tier 2 lands are canal lots located a distance from U.S. 1 with a potential for secondary impacts on the endangered species from traffic. Tier 3 lands are canal lots in close proximity to U.S. 1, which provide little habitat value to the endangered species and because of location, a decreased potential for deer kills from vehicles. Some undeveloped lots in Tier 3 are also located between existing developed commercial lots in the U.S. 1 corridor.

The development activities proposed in the Plan are expected to occur over a 20-year horizon. Proposed activities include:

- Residential units at a rate of roughly 10 per year for a total of 200 units.
- New commercial development, limited to 2,400 square feet a year, around existing commercial areas, mainly along the U.S. 1 corridor.
- New recreational facilities constructed on existing developed or disturbed/scarified lots.
- Limited expansion of community uses, churches, public offices, wastewater facilities, and the existing fire station.
- The widening of local, paved roads to accommodate bicycle paths, and storm water and sanitary sewer infrastructure and a third lane on U.S. 1.

Table of Contents	
Chapter One:	
Introduction	8
Summary of LCP and HCP Processes	15
Format of Master Plan Elements	19
Chapter Two: Land Use and Redevelopment Element	
Goal 1: Directing Growth	23
Goal 2: Managing Growth	29
Goal 3: Housing	36
Goal 4: Non-Residential Uses	42
Goal 5: Community Organizations	47
Goal 6: Recreational Uses	50
Goal 7: Public Facilities	53
Goal 8: Accessory Uses	57
Goal 9: Land Acquisition	59
Chapter Three: Environmental Protection Element	
Goal 10: Natural Resource Management	64
Goal 11: Freshwater Resource Management	69
Chapter Four: Community Character Element	
Goal 12: Community Character	72
Goal 13: Historic Resources	76
Chapter Five: Economic Development Element	
Goal 14: Economic Development	79
Chapter Six: Traffic and Transportation Element	
Goal 15: Transportation	83
Chapter Seven: Community Participation Element	
Goal 16: Community Participation	87
Capital Costs Summary	91
1	

	List of Figures	
Figure 1.1	Map of private, upland, vacant residential parcels.	12
Figure 1.2	Flow chart illustrating master plan process.	21
Figure 2.1	Tier designations on Big Pine and No Name Key.	28
Figure 2.2	FLUM and land use district changes.	35
Figure 2.3	Existing uses and commercial types in the U.S. 1 Corridor.	43
Figure 2.4	Location of existing institutional uses on Big Pine.	49
Figure 2.5	Location of existing recreational facilities and library.	52
Figure 2.6	Existing government facilities on Big Pine.	54
Figure 2.7	Private, undeveloped land within Tier I and Tier II.	62
Figure 4.1	Conceptual U.S. 1 corridor area map.	73
Figure 6.1	Existing platted residential and major roadways.	86
	List of Tables	
Table 1.1	Updated demographics for Big Pine/No Name from the 2000 Census.	10
Table 2.1	H multiplier for land use development categories.	25
Table 2.2	Calculation of H impact for different development activities.	26
Table 2.3	H-value budget for future development on Big Pine and No Name.	34
Table 2.4	Housing outside single family subdivisions.	36
Table 2.5	Housing figures of Big Pine and No Name from the 2000 Census.	37
Table 2.6	Big Pine Key commercial data.	42
Table 2.7	Institutional uses on Big Pine Key.	47
Table 7.1	Estimated cost of capital improvements	91
Table 7.2	Estimated cost of 3 to 1 mitigation	92

Acronyms

BOCC Monroe County Board of County Commissioners

CARL State of Florida Conservation and Recreational Lands Program

ESA Endangered Species Act

FDCA Florida Department of Community Affairs

FDEP Florida Department of Environmental Protection

FDOT Florida Department of Transportation FKAA Florida Keys Aqueduct Authority FKCCS Florida Keys Carrying Capacity Study

FKERTF Florida Keys Environmental Restoration Trust Fund

FLUM Future Land Use Map

FWS United States Fish and Wildlife Service

HCP Habitat Conservation Plan ITP Incidental Take Permit

LCP Livable CommuniKeys Program NGO non-governmental organization

NROGO Non-residential Rate of Growth Ordinance

PUV private upland vacant parcel PVA population viability analysis

ROGO Residential Rate of Growth Ordinance SFWMD South Florida Water Management District

SMMP Monroe County Stormwater Management Master Plan

SOR State of Florida Save Our Rivers Program

SWMP Monroe County Sanitary Wastewater Master Plan

TDR transferable development rights

TNC The Nature Conservancy

TRE transferable ROGO exemptions

Introduction

The Livable CommuniKeys Program (LCP) is a community-driven planning effort to address the very specific needs of unique island communities within the Florida Keys. The overall goal is to determine the appropriate amount, type and location of additional development within the LCP planning area. The LCP process includes community participation through a variety of methods. This process generates a community vision and alternative development scenarios. The scenarios are evaluated for feasibility within the current regulatory and physical framework and for how well they fit the community vision. A preferred alternative is identified and a master plan for future development is written around the preferred alternative. A Master Plan contains the specific development layout for the LCP planning area as well as action items that must be implemented to achieve the development and community vision. The Master Plan is a working document that is continually scrutinized and updated by the community.

Relationship to Comprehensive Plan

The Monroe County Year 2010 Comprehensive Plan was adopted in 1993 and became effective in its entirety in 1997. It contains the guiding goals, objectives and policies for implementation of growth management actions over the 20-year period covering 1990 through 2010. Some of the actions apply equally throughout Monroe County such as the need for adequate solid waste disposal facilities or the allocation of building permits limited by hurricane evacuation clearance times. Other actions, such as the need for preservation of historic resources or the planning of recreational facilities, while applying county-wide, vary in their importance by locale. There are also local needs that are not addressed in the Comprehensive Plan at all such as community goals towards beautification.

The Master Plan does not replace the Comprehensive Plan but focuses on the very specific needs of the local community. It is also a proactive planning tool rather than a strict regulatory document in that it identifies actions needed to meet the community's needs and goals. The Master Plan is attached as an addendum to the Comprehensive Plan. Some existing Comprehensive Plan policies will not be affected at all by the Master Plan. Other existing policies may be modified for consistency or entirely replaced by the Master Plan. The Livable CommuniKeys Program and Master Plan development are outlined in the comprehensive plan in Policy 101.20.1 that states:

"Monroe County shall develop a series of Community Master Plans. Master Plans will be developed in accordance with the following principles:

- 1. Each Community Master Plan will contain a framework for future development and redevelopment including the designation of growth boundaries and future acquisition areas for public spaces and environmental conservation;
- 2. Each Community Master Plan will include an Implementation Strategy composed of action items, an implementation schedule, and a monitoring mechanism to provide accountability to communities:
- 3. Each Community Master Plan will be consistent with existing Federal and State require-

ments and overall goals of the 2010 Comprehensive Plan to ensure legal requirements are met. While consistency with the goals of the 2010 Comprehensive Plan is paramount, the 2010 Plan will be updated and amended where appropriate;

- 4. Each Community Master Plan will be closely coordinated with other community plans and other jurisdictions to ensure development or redevelopment activities will not adversely impact those areas;
- 5. Each Community Master Plan will include appropriate mechanisms allowing citizens continued oversight and involvement in the implementation of their plans. Through the Community Master Plans, programs for ongoing public involvement, outreach, and education will be developed;
- 6. Each Community Master Plan will include a Capital Improvements program to provide certainty that the provision of public facilities will be concurrent with future development;
- 7. Each Community Master Plan will contain an environmental protection element to maintain existing high levels of environmental protection as required in the 2010 Comprehensive Plan;
- 8. Each Community Master Plan will include a community character element that will address the protection and enhancement of existing residential areas and the preservation of community character through site and building guidelines. Design guidelines for public spaces, landscaping, streetscapes, buildings, parking lots, and other areas will be developed through collaborative efforts of citizens, the Planning Department, and design professionals reinforcing the character of the local community context;
- 9. Each Community Master will include an economic development element addressing current and potential diversified economic development strategies including tourism management. The preservation and retention of valued local businesses, existing economies, and the development of economic alternatives will be encouraged through the process;
- 10. Each Community Master Plan will contain a Transportation Element addressing transportation needs and possibilities including circulation, safe and convenient access to goods and services, and transportation alternatives that will be consistent with the overall integrity of the transportation system not resulting in negative consequences for other communities; and
- 11. Each Community Master Plan will be based on knowledge of existing conditions in each community. The Planning Department will compile existing reports, databases, maps, field data, and information from other sources supplemented by community input to document current conditions; and
- 12. Each Community Master Plan will simplify the planning process providing clarity and certainty for citizens, developers, and local officials by providing a transparent framework for a continuing open dialogue with different participants involved in planning issues."

Relationship to State Legislation

The Comprehensive Plan was required to be adopted by Monroe County under Florida Statute 163 and must be compliant with the required format and minimum content listed in the Florida Administrative Code (FAC 9J-5). The Master Plan will be adopted as a modification of the existing Comprehensive Plan and the Florida Department of Community Affairs will review the modification for compliance with the applicable statutes and codes. This review will likely be most focused in areas where Master Plan policies replace existing Comprehensive Plan policies and serve as the Evaluation and Appraisal Report (EAR) for elements which address this planning area. Of course a comprehensive plan may include elements that are either optional or not listed at all in FAC 9J-5 and that is where the Master Plan is particularly valuable.

Master Plan for Big Pine and No Name Keys

This Master Plan covers Big Pine Key, No Name Key and the Newfound Harbor Keys, collectively referred to as the "planning area" throughout this document. For purposes of information presentation (such as demographics), the Newfound Harbor Keys are included with Big Pine Key. A companion document to this Master Plan, the "Big Pine Key & No Name Key Development Alternatives Report," (hereafter referred to as the Development Alternatives Report) summarizes the background information for these islands.

Demographics

Some of the demographic information in the Development Alternatives Report was extrapolated from the 1990 census. Table 1.1 below presents some updated data from the 2000 census. The data show that most of the population live north of U.S. 1. Nearly 25% of the permanent household population are in rented units. During the winter season the population increases by nearly 38% to an estimated 6,944. The average persons per household on Big Pine is 2.21 and on No Name it is 2.48.

Table 1.1 Updated demographics for Big Pine/No Name from the 2000 census.				
	Big Pine	No Name	Combined	
Total Permanent Population	5,032	40	5,072	
North of U.S. 1	4,458	40	4,498	
South of U.S. 1	574	0	574	
In Families	1,419	13	1,432	
In Owned Housing Unit	3,749	36	3,785	
In Rented Housing Unit	1,222	4	1,226	
Seasonal Population (i.e., additional)	1,912	23	1,935	
Source: U.S. Census 2000				

Existing Land Conditions

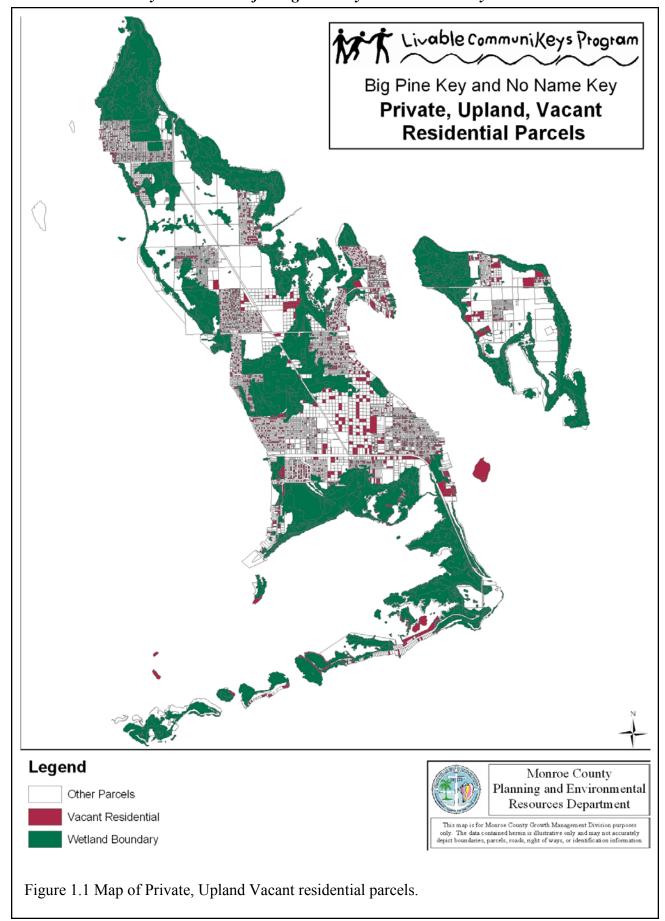
As natural habitat is acquired by resource agencies for preservation, most of the vacant buildable upland parcels remaining under private ownership are located within improved subdivisions or in commercial acreage near U.S. 1. There are approximately 2,920 vacant building residential lots remaining and approximately thirty-one parcels of vacant private upland commercial land remains covering about 18 acres. The remainder of the planning area is developed (about 12% of the land area), under public ownership (about 72% of the land area) or is located in unbuildable wetlands (under both public and private ownership). Public land owners primarily include the U.S. Fish and Wildlife Service Refuge System, the State of Florida and Monroe County.

Figure 1.1 on the following page shows vacant, upland residential lots under private ownership.

Development Context and Constraints

Listed below for reference purposes are the primary existing constraints on Big Pine Key and No Name Key development. All of these constraints apply county-wide but their particular application to Big Pine Key and No Name Key is discussed here.

- Concurrency Standards: Since March of 1995 the segment of U.S. 1 on Big Pine Key had been operating below the adopted level of service in the Comprehensive Plan. This has been the primary development constraint because it triggered a development moratorium on all new traffic-generating development. In 2002 FDOT completed an intersection improvement project and deer underpasses which improved the level of service to an acceptable level, however further improvements such as adding a third lane to the segment are necessary to permanently raise the operating level of service. This has been a primary motivating factor behind completion of the HCP; the issuance of the incidental take permit will allow necessary road improvements to go forward, thereby lifting this constraint on development.
- ROGO: As of the date of this report, the residential rate of growth ordinance (ROGO) allocates 49 total units (market rate plus affordable) annually to the Lower Keys. This is the latest number in a step down reduction that has occurred since the ROGO started. The reductions have mostly been related to required performance standards set forth in the Comprehensive Plan. It is considered unlikely at this time that the total allocation number will increase at least in the next 3-5 years. Therefore, permits for Big Pine and No Name Key will continue to be limited along with the rest of the Lower Keys under ROGO. The point system used to rank permits for allocations under ROGO is currently structured to give a competitive advantage to units proposed outside Big Pine and No Name Keys. This was done to bolster protection of natural resources on these two islands. With the issuance of the Incidental Take Permit and adoption of the LCP by the county, the ROGO will be restructured.
- NROGO: "NROGO" is the acronym for "Non-residential Rate of Growth Ordinance" under which the construction of new or expanded commercial uses is regulated. The amount of new and expanded commercial space allowed on Big Pine and No Name Keys



is tied to the level of residential development permitted as is the case for the entire county. As of the date of this report, the dwelling unit allocation ordinance allocates 49 total units annually to the Lower Keys. At 239 square feet of commercial space per residential unit allocated under NROGO, this sets the approximate Lower Keys commercial rate at 11,711 square feet per year (NROGO does not allocate commercial space by Keys sub-area but does so Keys-wide on an annual basis). As previously noted, the residential allocation is subject to change (usually decreases), so the commercial allocation could also change. The point system used to rank permits for allocations under NROGO is currently structured to give a competitive advantage to development proposed outside Big Pine and No Name Keys. This was done to bolster protection of natural resources on these two islands. With the issuance of the Incidental Take Permit and adoption of the HCP by the county, the point system may be restructured.

- <u>Nutrient Credit System</u>: The Comprehensive Plan requires no net increase in the level of nutrients in wastewater effluent. The number of building permits is tied to the number of cess pits or substandard wastewater treatment replaced by a compliant treatment system. The Monroe County Sanitary Wastewater Master Plan (SWMP) originally projected that this infrastructure would be in place by 2010 to meet Florida law and Comprehensive Plan requirements. Implementation of the SWMP is behind schedule but still well within the 20 year planning horizon of this Master Plan. Once the upgraded sewer service is installed, or all illegal cess pits are eliminated, nutrient level of service standards will be met for all existing and future development.
- <u>Tier System</u>: Monroe County's new Smart Growth Initiatives (Comprehensive Plan Goal 105), "Tier Map," is designed to refocus land acquisition efforts, conserve natural resources and direct future development to infill areas in coordination with the Livable CommuniKeys Program. The Tier System will consist of a set of maps and regulations directing growth to infill of existing subdivisions and commercial areas. The Tier System plays a major role in the implementation of this Master Plan and the HCP.

Additional future constraints on numbers and locations of permits are:

- <u>Habitat Conservation Plan (HCP)</u>: The HCP applies to the Big Pine Key/No Name Key area only, not county-wide. The Incidental Take Permit, when issued, will limit development on Big Pine and No Name Keys to the level that will result in a maximum projected "take" of Key deer over the twenty-year planning horizon. The development levels contained in this Master Plan have been designed to meet the requirements of the anticipated Incidental Take Permit while meeting community needs.
- Florida Keys Carrying Capacity Study (FKCCS): The FKCCS analyzed the extent to which current and future projected development exceeds maximum impact thresholds of natural resources and infrastructure. The results of the FKCCS will be used to modify the ROGO and NROGO at some time in the near future and this may affect the number and location of residential permits that can be issued county-wide.

Acquisition Framework

For many years, the concurrent need for natural resource protection and relief to regulated land owners has been present throughout the Keys and particularly heightened for Big Pine and No Name Keys. The United States Fish and Wildlife Service (FWS) has been purchasing property under the refuge system since the National Key Deer Refuge was established in 1959. They can conduct acquisition activities essentially anywhere within the refuge administrative boundaries, which encompass the entire planning area. Their focus in the past has been on natural lands, usually on acreage parcels, that have higher wildlife habitat value. In the early 1990s they produced a priority acquisition plan that focused on remaining habitat and preservation of wildlife movement corridors.

These two islands were included in three ongoing state acquisition efforts in the 1990s: the Conservation and Recreational Lands (CARL) Program, the Florida Forever Program (formerly Preservation 2000) and the Save Our Rivers (SOR) Program. The latter program concentrated on protection of the existing freshwater sloughs and wetlands on Big Pine Key and has been completed. There are lands remaining to be purchased within the CARL boundaries. Also, the CARL boundaries are periodically reviewed at which time new lands may be added. Monroe County has actively prioritized Big Pine and No Name Keys for purchases by the Monroe County Land Authority. Many purchases by private citizens have also been made to garner additional "points" towards an allocation under the county's dwelling unit allocation ordinance (ROGO) and these properties have been deeded over to the county. The HCP and LCP processes will somewhat change and concentrate the focus of future acquisition efforts. Future acquisition and management of vacant lands will be a major component of this Master Plan.

Summary of LCP and HCP Processes

Livable CommuniKeys

The Livable CommuniKeys Program (LCP) is a community-driven planning effort aimed at determining the amount, type and location of additional development appropriate for the planning area. The Big Pine Key/No Name Key community is the first one in the county to embark upon the LCP planning process. The process was initiated in April 2000. The Development Alternatives Report was generated in March 2001. These interim products of the LCP process were then coordinated with the development of the HCP over the next year and a half. This Master Plan is the result of that coordination.

Community Input Summary

Three major public workshops and meetings facilitated the LCP effort and were followed up by newsletters mailed to all residents, property owners and interested parties. Stakeholder discussions and citizen surveys were also conducted. The newsletters summarized needs and desires expressed by the community in the workshops. A fourth newsletter was issued in January of 2003 and summarized the development proposals set forth in this plan. From this outreach effort key community issues were identified and a community vision was formulated. The community vision and stated planning objectives were used to evaluate possible development alternatives. This evaluation is contained in the Big Pine Key & No Name Key Development Alternatives Report.

Key Community Issues

In the LCP workshops the following key community issues were identified:

- 1. Ascertain the distribution of future residential development within the project area.
- 2. Maintain the rural character of the project area while still allowing some future development.
- 3. Implement solutions to the congestion on U.S. 1 and minimize the need for local trips on U.S. 1.
- 4. Develop a community gathering place and/or more active recreation facilities.
- 5. Discourage new development on No Name Key.

Planning Objectives

- 1. Minimize the need for local vehicular trips on and across U.S. 1 from north to south.
- 2. Improve the level of service on U.S. 1 to a standard that, in accordance with local regulations, would allow some development and to maintain that level of service over the planning horizon.
- 3. Discourage new development on No Name Key.
- 4. Encourage additional commercial development to be oriented to the local community rather than to the regional or tourist community.
- 5. Continue to allow some new development but generally keep the level low to achieve the maintenance of a "rural community" envisioned by the community.
- 6. Provide for a community gathering center and some active recreation.
- 7. Provide for a conservation plan with reasonable level of implementation costs and logistics.
- 8. Provide for a conservation plan that complies with current regulatory constraints.

- 9. Provide greater certainty to the property owners and Key deer herd managers as to the location of future development.
- 10. Minimize the alteration of undisturbed natural habitat.

Community Vision

"We envision Big Pine and No Name Key as:

- A rural community with a small town atmosphere and way-of-life where people feel a connection with their friends and neighbors.
- A community rich in natural and scenic resources including endangered habitat found nowhere else in the world.
- A unique community in the Florida Keys where people can live in harmony with the natural world.
- Where residents and visitors can take advantage of the local goods and services without fighting traffic.
- Where kids of all ages have plenty of recreational opportunities.
- Where the dreams of home ownership and planting roots in the community can be realized.
- Where government regulations make sense and work for the betterment of all.
- Above all, we envision a community that responds to the needs of all its inhabitants."

Alternatives Analysis

Several alternative planning strategies for Big Pine Key and No Name Key were formulated. These strategies were aimed at satisfying basic community needs within the existing regulatory framework. The alternatives were then subjected to a planning analysis to see which ones were consistent with the community vision, addressed the ten planning objectives, could meet community needs and desires, and were within reasonable cost and feasibility. Alternatives for residential, commercial, recreational and transportation development were all evaluated. The analysis is contained in the Big Pine Key & No Name Key Development Alternatives Report, which is a companion document to this Master Plan. Alternatives considered to be the most feasible for fulfillment of community needs and desires included a clustered residential plan and a commercial redevelopment plan. Options for meeting community recreational and transportation needs were also presented. These alternatives were then analyzed for consistency with environmental goals, particularly protection of endangered species. This was done through development of a Habitat Conservation Plan (HCP) for these islands.

Habitat Conservation Plan

The development of a Habitat Conservation Plan (HCP) for Big Pine and No Name Keys was considered a reasonable way to resolve ongoing conflicts over the impacts of development on natural resources. The Big Pine Key & No Name Key Development Alternatives Report recounts the history of these conflicts and previous failed planning efforts for the islands. Section 10 of the Endangered Species Act (ESA) allows a developer, the "applicant," to apply for a permit for "incidental take" of federally-designated endangered species. The process basically involves determining the level of reduction or "take" of the species caused by the proposed development. The applicant proposes the development along with a plan for mitigating the "take" caused by the development. The mitigation plan is written in the form of a Habitat Conservation Plan.

The HCP process for Big Pine Key and No Name Key was initiated in February 2000. The applicants are Monroe County, the Florida Department of Community Affairs (FDCA) and the Florida Department of Transportation (FDOT). The FDOT is a builder of proposed development within the state road right-of-way (U.S. 1) whereas the remaining two entities have authority over permitting of proposed development in the remainder of the planning area. The Habitat Conservation Plan document was produced with the assistance of an HCP committee made up of concerned agencies and citizen representatives. The document was completed in March 2003 and an application for the Incidental Take Permit was made to the FWS in May 2003. The process to develop the HCP consisted of three major components: 1) study of the endangered species populations and conditions necessary for their continued viability, 2) crafting of a proposed development action within this context and determination of the level of "take" caused by the action, and 3) development of a plan for mitigating the determined level of "take."

Key Deer PVA Analysis

The HCP was designed to cover all federally-protected species known to occur on the two islands. Of the nine species covered, two were prioritized for analysis based on their sensitivity to development: the Florida Key deer (*Odocoileus virginianus clavium*) and the Lower Keys marsh rabbit (*Sylvilagus palustris hefneri*). If the habitat needs of these two species could be met, the needs of the remaining seven would be met automatically. Of the two species, the Lower Keys marsh rabbit is the more endangered, largely due to fragmentation of habitat already having occurred throughout much of its range in the Lower Keys. Protection of existing preferred habitat, mostly wetlands, is less an issue than secondary impacts (e.g., predation by domestic cats) and limitations on dispersal caused by existing development barriers. Additional "take" of this species had to be prevented due to its precarious situation. This was done by proposing a prohibition on development within the core habitat (mostly wetlands) and within buffer zones that surround the core habitat.

The Florida Key deer is a wide-ranging species with a core population located on Big Pine Key and No Name Key. For this species a population viability assessment (PVA) was completed and a model was developed to theoretically predict the response of the population to scenarios involving habitat loss, secondary mortality impacts (e.g. road kills) and major catastrophic events (i.e. hurricanes). One product of this model analysis was an actual map of the islands showing areas necessary for continued viability of the deer population and areas most suited for human development (i.e. least affecting deer viability). This map was used to re-analyze the LCP alternatives and generate a proposed development action. A detailed explanation of the PVA and modeling process is contained in the HCP document.

Summary of Proposed Action

The proposed development action in the HCP is expressed in terms of the total level of impact that will result in an acceptable level of "take" of the Key deer and no "take" of the Lower Keys Marsh Rabbit. The level of "take" of the Key deer is determined by the removal of habitat value measured in discrete units. The habitat value units are assigned to individual parcels within the planning area and consist of two main components: direct impact (habitat loss) and indirect impact (roadway mortality). Location and traffic generation are the two primary development components causing these impacts. The HCP will equate the total loss of habitat value units to a specific level of acceptable impact. Monroe County will need to track the impact of issued permits to ensure that the total acceptable level of habitat value units is not exceeded. The HCP

will not specify exactly where permits will be issued or for what type of development, but it will provide clear direction to the county on which locations and types will have greater impact. Furthermore, the preferred development alternative, generated by the LCP process and refined through the HCP process, has been analyzed using the PVA model. This process has allowed the county to plan for distribution of potential permits over the maximum available range of types and locations to meet community needs.

Summary of Habitat Conservation Plan

The Habitat Conservation Plan proposes to mitigate the "take" of Key deer mainly by putting habitat under public protection. Habitat protection is considered the highest priority action for protection of Key deer and other listed animal and plant species. Thus the habitat value units expended by allowing development can be mitigated to some extent by acquiring a certain level of habitat value elsewhere. In addition avoidance and minimization measures were applied at every step in the preparation of the HCP and the LCP to reduce potential impacts from the proposed future development plan. Mitigation will also involve management of the acquired habitat, and other activities. The HCP also proposes actions to minimize development impacts. Examples include implementation of traffic calming designs and restrictions on fencing. The Master Plan provides the details on how these minimization and mitigation actions will be implemented.

Effect of Issuance of Incidental Take Permit

The application for an Incidental Take Permit under Section 10 of the ESA was submitted in May 2003. Issuance of a permit is expected within two years. It is very important to note that because the HCP process included all concerned agencies and stakeholders, including the FWS in a technical support role, the HCP document as currently proposed is expected to be acceptable to the federal government with a minimal amount of changes. Of course the document must go through the public process and the final content may change. Based on the substantial coordination that has taken place thus far and in consideration of the substantial permit processing time involved, Monroe County is moving forward now with this Master Plan. There are components of the Master Plan that could be changed later, however, to match the final HCP document that accompanies the issued Incidental Take Permit. Both documents have a planning horizon of twenty years that starts upon issuance of the Incidental Take Permit.

Format of Master Plan Elements

There are six elements in this Master Plan. Each one focuses on an issue of heightened importance to Big Pine Key and No Name Key. The format for these elements is different from the comprehensive plan because this Master Plan is a culmination of the LCP process, not a starting point. Therefore, the community and planning staff have already reviewed and analyzed much of the available data about the island and they have been through a planning process whereby "problems" (questions, issues, uncertainties) have been identified and needs have been verbalized. Many of the opportunities and constraints for meeting these needs have also been analyzed through the development alternatives analysis. This information is contained in the Big Pine Key & No Name Key Development Alternatives Report.

The Master Plan seeks to further condense and refine the products of the development alternatives analysis process. The Master Plan provides the tools for problem solving by fulfilling three basic tasks:

- Statement of the goals of the LCP/HCP process as it applies to the planning area,
- Refined analysis of specific community and planning needs to fulfill the goals,
- Identification of strategies to meet the needs.

<u>Goals</u>: Each element states a specific planning goal designed around the major topics to be addressed through the LCP process such as growth and redevelopment, economic viability, environmental protection, and community character. This particular Master Plan also includes goal language designed to address the requirements of the HCP process.

<u>Current Conditions Summary</u>: A certain amount of information specific to the planning area is available and can be presented or cited in the Master Plan now. Some of this information was provided during the LCP process in newsletters and workshops. Demographics, inventories of community facilities, and land ownership patterns are examples of information presented in this section.

Analysis of Community Needs: The problem, issue or shortfall in the community or environment is stated here. These have been identified either by the community or by the planning staff. The community includes the affected public, stakeholders, and elected officials and they have identified needs to the planning staff in a variety of ways: workshop participation, mail surveys, meetings, phone calls, and letters. The planning staff identified additional needs either through planning analysis of existing information, professional judgment based on observations of data or conditions, or coordination with facility or service providers.

<u>Final Strategies and Action Items</u>: As part of the Master Planning process the planning staff has identified and evaluated possible strategies for meeting each need. The possible strategies were also evaluated relative to one another to identify conflicts and to identify opportunities for one strategy to fulfill multiple needs. In this way a final set of strategies was completed. Action items were then developed towards implementation of each strategy.

The plan is therefore written in the form of goals, strategies and action items rather than goals, objectives and policies as in the Comprehensive Plan. Where strategies and action items replace current comprehensive plan policies, this is noted and action items for deleting or modifying

those policies are included in the applicable element. It is very important to note that this plan will be an addendum to the Monroe County Year 2010 Comprehensive Plan. *The Comprehensive Plan remains in effect in the Big Pine Key/No Name Key planning area.*

The plan format is illustrated in the flow chart in Figure 2.1. The flow chart starts with an individual need identified in the plan. A comprehensive strategy for meeting the need is formulated based on the information in hand. If the information in hand is sufficient to implement the strategy the action items for implementation can be written directly into the Master Plan. If not, an action item can be written to procure new information or further analyze existing information. Note that new information not only feeds back into implementation but may reveal new strategies, may redefine the need or may even reveal new needs. To be a meaningful and current implementation tool over the entire twenty-year planning horizon the Master Plan must include this iterative process of problem solving that monitors success and identifies changing conditions and new issues. It must also allow for timely response and tracking of progress towards problem solving.

Using this format the Master Plan moves the LCP/HCP process into its final phase by taking the following steps:

- 1. Adopt as the plan framework, the preferred land use scenario developed during the LCP/ HCP process providing the basis for the anticipated incidental take permit.
- 2. Develop and refine the implementation details of the preferred land use scenario.
- 3. Include mechanisms for ensuring that the Master Plan complies with the anticipated incidental take permit through the twenty-year planning horizon.
- 4. Include mechanisms and revisions for ensuring that the Master Plan complies with the Monroe County Year 2010 Comprehensive Plan.
- 5. Address new issues relevant to the planning area that were not addressed in either of the aforementioned processes (Comprehensive Plan and HCP) and that have no impact or a positive impact on the ability to comply with those two processes.

